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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,026	02/02/2000	Katsumi Tahara	450100-2952.2	6986

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EXAMINER	
DIEP, NHON THANH	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/497,026	TAHARA ET AL.	
	Examiner	Art Unit	
	Nhon T. Diep	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-27* is/are allowed.

6)☒ Claim(s) *28-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The examiner acknowledges the receiving of the Supplemental Declaration with applicants' signatures.

Response to Arguments

2. Applicant's arguments, see page 3-5, filed 1/3/2006, with respect to 35 USC 102 (e) rejection of claims 1-47 have been fully considered and are persuasive. The rejection of claims 1-47 has been withdrawn.

3. Applicant's arguments, see remark, pages 5-8, filed 1/3/2006, with respect to the rejection(s) of claim(s) 28-47 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Eyubolu et al, in view of Puri and Kretz et al (US 4,292,651).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 28-33 and 38-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyuboglu et al, in view of Kretz et al (US 4,292,651) and Puri (US 5,563,593).

Eyuboglu et al discloses an efficient transcoding device comprising the same encoding apparatus for encoding source video data which had previously been encoded

at a previous encoding process and had previously been decoded at a previous decoding process (fig. 3), the apparatus comprising means for receiving the source video data (fig. 3, el. 304); means for extracting coding information from the source data, wherein the coding information relates to a coding operation of the previous encoding process (fig. 10, output of el. 1002 to el. 1022, 1020 and 1010); and means for encoding the source video data in accordance with the coding information (el. 1010) as specified in claims **28, 29, 30, 31 and 44-47** and means for receiving picture coding type indicating which of I-picture, P-picture or B-picture had been associated with the previous coding process (fig. 10, output of el. 1002: framing inter/intra) as specified in claims **32 and 33**; a decoding apparatus for decoding an encoded bit stream which had been encoded at the previous encoding process, the apparatus comprising means for extracting coding information from the encoded bit stream, wherein the coding information relates to a coding operation of the previous encoding process; means for decoding the encoded bit stream to generate decoded video data in accordance with the coding information (fig. 3, el. 304 and col. 4, ln. 25-33: "achieve the performance of decode"); and means for transmitting the decoded video data and the coding information so that the coding information will be used in a later encoding process for the decoded video data (fig. 10, outputs of el. 1002) **38, 39, 40 and 41** and wherein the picture coding type indicates which of I-picture, P-picture or B-picture had been associated with the previous coding process (fig. 10, output of el. 1002: framing inter/intra) as specified in claims **42 and 43**. It is noted that Eyuboglu et al does

disclose the video data source that is to be inputted to the transcoder had previously been encoded (output of element 302 of fig. 3) but not particularly disclose:

a. the same video data source had NOT been previously decoded ; and

b. the coding information is included in a data identification area of the source video data as amended to claims 28--33 and 38-47.

With regard to a: It is noted that Eyuboglu et al also teaches that "transcoder will be required in many applications, for example, to change the constant bit rate video stream into variable bit rate and also in the case of conversion between two video compression formats and also in the case of multi-point video conferencing" (page 1, ln. 60 – page 2, ln. 8). The above passage suggests that, at least, in the case of CBR MPEG encoded video bit stream could be twice transcode to form a VBR that is compliance to H.261 bit stream by first transcoding MPEP encoded video bit into a H.261 video bit stream and then transcoding a CBR H.261 video bit stream into a VBR H.261 video bit stream. And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to place two transcoders in series to convert a CBR MPEG encoded video bit stream into a VBR, H.261 video bit stream to serve the needs of customers. By doing so, the input of the second transcoder would have been both encoded and decoded earlier. The reference of Kretz, figure 7, el. 20-22 also shows two transcoders in series.

With regard to b: It is noted that Eyuboglu et al further discloses "State-of-the-art digital video coding systems utilize transform coding for spatial compression and a form of predictive coding known as motion-compensated prediction (MCP) for temporal

compression. Video compression techniques that have recently been adopted in international standards (e.g., the MPEG standard developed by the International Standards Organization's Motion Picture Experts Group (ISO's MPEG) and ITU-T's H.261), or others that are under consideration for future standards, all employ a so-called block-matching MCP technique."(col. 1, ln. 41-51). In addition to that, Puri teaches header information is available in the digital coding information as part of the MPEG standard and is can be identified by the decoder and that the header information includes picture type and other information as well (col. 7, ln. 13-37). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to recognize that, the coding information if it had not already been part of the digital picture signal and can be identified by the decoder of Eyuboglu et al, then it would have been obvious to one of ordinary skilled in the art at the time the invention was made to include the coding information in a data identification area of the source video data to be identified by the decoder as taught by Puri. Doing so would help to meet the MPEG standard and help to decode video signal properly.

6. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyuboglu et al, in view of Puri and Kretz.

As applied to the rejection of claim 38 above, it is noted that the combination of Eyuboglu et al, in view of Puri and Kretz does not particularly disclose a multiplexer for multiplexing the decoded video data and the coding information to generate multiplexed data; and means for transmitting the multiplexed data so that the coding information will be used in other encoding process as specified in claims 34-37. Eyuboglu et al shows

that outputs of the decoder (fig. 10, el. 1002) can be directly fed to adder 1004 and encoder 1010 without the need of multiplexing these outputs and separating them again at later step. As a matter of designer's choice and/or efficiency, it would have been obvious to one of ordinary skilled in the pertinent art at the time the invention was made to either feed both outputs of el 1002 separately or multiplexing them and separating them later.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Critchlow et al (US 4,893,317) discloses digital signals and frequency correction in a digital wireless system.

b. Speidel et al (US 4,825,285) discloses hydrid encoder.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND
3/1/2006

NHON DIEP
PRIMARY EXAMINER